

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1-35 and ADD new claims 36-50 in accordance with the following:

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36. (NEW) A plasma display apparatus, comprising:

a plurality of X electrodes, a plurality of Y electrodes arranged adjacently to the plurality of X electrodes by turns and each causing a discharge to occur between the neighboring X and Y electrodes, an X electrode drive circuit for applying a discharge voltage to the plurality of X electrodes, and a Y electrode drive circuit for applying a discharge voltage to the plurality of Y electrodes;

at least one of the X electrode drive circuit and the Y electrode drive circuit comprising a first switch supplying a high level voltage to the plurality of X electrodes or the plurality of Y electrodes, a second switch supplying a low level voltage to the plurality of X electrodes or the plurality of Y electrodes, and a pre-drive circuit driving the first switch and the second switch;

the pre-drive circuit comprising a plurality of drive systems each having an input amplifier circuit amplifying an input voltage, input to an input voltage terminal, a high level shift circuit shifting a level of a signal output from the input amplifier circuit and an output amplifier circuit

amplifying a shift signal output from the high level shift circuit, wherein each drive system has a common constitution and the plurality of drive systems are provided within an IC formed on a common semiconductor chip.

37. (NEW) The plasma display apparatus as set forth in claim 36, wherein each drive system includes a low level shift circuit shifting a level of a signal, output from the input amplifier circuit, to a signal referred to a negative reference voltage, and the high level shift circuit shifts the level of the signal output from the low level shift circuit.

38. (NEW) The plasma display apparatus as set forth in claim 37, wherein each drive system includes a waveform processing circuit processing a waveform of the signal output from the low level shift circuit, the high level shift circuit shifts the level of the signal output from the waveform processing circuit, and the waveform processing circuit is connected to a negative reference voltage input terminal, to which the negative voltage is input, and a negative supply voltage input terminal, to which a negative supply voltage, having a predetermined voltage referred to the negative reference voltage, is input.

39. (NEW) The plasma display apparatus as set forth in claim 38, wherein a power supply terminal, supplying a drive power supply of the input amplifier circuits of the plurality of drive systems, and a power supply terminal, supplying a drive power supply of the output amplifier circuits of the plurality of drive systems and the negative supply voltage input terminal, are separately provided.

40. (NEW) The plasma display apparatus as set forth in claim 38, wherein the waveform processing circuit is a Schmitt trigger circuit.

41. (NEW) The plasma display apparatus as set forth in claim 38, wherein the waveform processing circuit has an integrating circuit to eliminate noise.

42. (NEW) The plasma display apparatus as set forth in claim 36, wherein two of the drive systems of the plurality of drive systems are paired, and each pair includes a simultaneous ON avoiding circuit to maintain an output of one of the two drive systems of the pair to be inactive when an output of the other of the two drive systems of the pair is active.

43. (NEW) The plasma display apparatus as set forth in claim 36, wherein:
the pre-drive circuit includes first, second, third and fourth drive systems;
at least one of the X electrode drive circuit and the Y electrode drive circuit further comprising:
a third switch supplying a high level voltage to the plurality of X electrodes or the plurality of Y electrodes via a first coil, and
a fourth switch supplying a low level voltage to the plurality of X electrodes or the plurality of Y electrodes via a second coil;
the first drive system of the pre-drive circuit drives the first switch;
the second drive system of the pre-drive circuit drives the second switch;
the third drive system of the pre-drive circuit drives the third switch; and
the fourth drive system of the pre-drive circuit drives the fourth switch.
44. (NEW) The plasma display apparatus as set forth in claim 36, wherein a previous stage or a subsequent stage of the plurality of drive systems of the pre-drive circuit further comprises a delay time adjusting circuit to adjust an input time and output time of a signal.
45. (NEW) The plasma display apparatus as set forth in claim 43, wherein a voltage different from the reference voltage is applied to a terminal of the third switch, other than a terminal thereof connected to the plurality of X electrodes or the plurality of Y electrodes.
46. (NEW) The plasma display apparatus as set forth in claim 43, wherein a voltage, other than a middle voltage between the high level voltage and the low level voltage, is supplied to a terminal of the third switch element other than a terminal thereof connected to the plurality of X electrodes or the plurality of Y electrodes.
47. (NEW) The plasma display apparatus as set forth in claim 36, wherein the high level voltage is a supply voltage and the low level voltage is a ground voltage.
48. (NEW) The plasma display apparatus as set forth in claim 36, wherein the high level voltage is a positive voltage and the low level voltage is a negative voltage having an absolute value which is the same as that of the high level voltage.

49. (NEW) The plasma display apparatus as set forth in claim 36, wherein a previous stage of a plurality of input voltage terminals of the pre-drive circuit comprises an input level shift circuit to convert a level of an input signal referred to a ground voltage into one referred to the low level voltage.

50. (NEW) The plasma display apparatus as set forth in claim 36, wherein a reset pulse is supplied to at least one of the X and Y electrodes, and a low voltage, which is applied to a terminal of the second switch, is increased when the reset pulse is supplied.